PHYSICIAN ALERT V

WEST NILE VIRUS

PHYSICIAN ALERT

The Department of Health continues to emphasize the importance of active surveillance for human cases of West Nile Virus (WNV). For information on laboratory testing for WNV call (202) 535-2323.

For clinical questions about WNV, please call (202) 442-9196.

Reporting suspected cases of West Nile Virus (WNV) encephalitis

All suspected and confirmed cases of viral encephalitis and meningoencephalitis are reportable to DOH. To monitor for WNV infection in people, the Department of Health (DOH) is offering laboratory testing for WNV and other arboviruses in persons hospitalized with encephalitis, meningoencephalitis, or aseptic meningitis, in that order or priority. (Physicians should be on the alert for cases of viral encephalitis associated with diffuse muscle weakness, which is commonly seen with WNV infection.) However, in spite of the publicity about WNV, it should be remembered that there are many other, more likely causes of encephalitis and aseptic meningitis. In the late summer and early fall, enteroviruses should be considered, particularly in patients 16 years of age or younger with encephalitis or aseptic meningitis. Other causes of encephalitis include herpes simplex (HSV) or varicella zoster (VZV). All confirmed positive IgM and IgG results from commercial laboratories must be reported immediately to DOH at (202) 535-2323.

Mild Illness

Testing for WNV is not available or indicated for persons suspected of having WNV infection on the basis of mild illness, such as fever or headache, and recent mosquito bites. Rather than testing these persons, they should be advised to seek medical attention if more severe symptoms develop such as confusion, severe muscle weakness, lethargy, severe headache, stiff neck or photophobia.

Testing for West Nile Virus (WNV)

Please submit > 5.0 ml of serum (or plasma for virus isolation) and >1.0ml of CSF. Please do not submit whole blood. Convalescent specimens should be clearly labeled as such so appropriate testing can be done.

A copy of the case report must accompany each specimen/set of specimens submitted for testing.

Guidelines for specimen collection and submission for each type of test:

The viremic phase of a WNV infection in humans is generally of short duration, with low detectable virus titers. Therefore, virus isolation and/or testing by PCR is only conducted on CSF or plasma collected within five days of illness onset, or on postmortem specimens. CSF samples are also to be forwarded for serological testing if sufficient volume remains. After five days, serological testing of serum or CSF is appropriate. The table below summarizes the guidelines for specimen collection and submission by type of test.

Test results

Negative results will be available 3-5 days after receiving the specimens and completed case report form. Positive results will take longer because confirmatory testing is required.

Please call (202) 535-2323 to provide the patient information needed to process specimens and for further specimen collection instructions. DOH staff will make arrangements for transporting specimens at that time.

Type of test	Specimen	Timing in relation to onset of illness	Transport
IgM capture ELISA (WNV, EEE, Wee, SLE, CE)	Serum	Within 22 days	Keep refrigerated and transport on wet ice
Paired IgG serology (WNV, EEE, Wee, SLE, CE)	Serum	Acute: within 14 days	
		Convalescent: 2-3 wks after acute specimen	
Virus isolation and PCR for WNV	Plasma (separate from whole blood within 2 hrs of collection)	Within 5 days	Freeze at –70° within 2 hrs of collection and transport frozen on dry ice.
	CSF	Within 5 days	-
	Post mortem specimens (brain stem tissue or CSF)	When obtainable	

For additional information please see the DC Department of Health's Website at http://www.dchealth.dc.gov



Government of the District of Columbia Anthony A. Williams, Mayor

